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| APPLICATION NO.      | FI                   | LING DATE  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|----------------------|----------------------|------------|----------------------|-------------------------|------------------|
| 10/072,219           |                      | 02/09/2002 | Edward Kendall Pye   | 2307                    |                  |
|                      | 7590                 | 03/08/2004 | -                    | EXAMINER                |                  |
| Edward Ke            |                      |            | ALVO, MARC S         |                         |                  |
| 210 Timber Jump Lane |                      |            |                      |                         |                  |
| Media, PA            | Media, PA 19063-1134 |            |                      | ART UNIT                | PAPER NUMBER     |
|                      |                      |            |                      | 1731                    |                  |
|                      |                      |            |                      | DATE MAILED: 03/08/2004 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.  | Applicant(s)  |  |  |  |  |
|--|--|---|--|--|--|--|
|  | 10/072,219   | PYE, EDWARD KENDALL   |  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit  |  |  |  |  |
|  | Steve Alvo   | 1731  |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with   | the correspondence address  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply within the statutory minimum of thirty (3 rill apply and will expire SIX (6) MONTH cause the application to become ABAN | y be timely filed  30) days will be considered timely. S from the mailing date of this communication. IDONED (35 U.S.C. § 133). |  |  |  |  |
| Status   |  |   |  |  |  |  |
| 1) Responsive to communication(s) filed on   |  |   |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This   | action is non-final.   |   |  |  |  |  |
| 3) Since this application is in condition for allowar  | nce except for formal matters  | s, prosecution as to the merits is  |  |  |  |  |
| closed in accordance with the practice under E   | x parte Quayle, 1935 C.D. 1  | 1, 453 O.G. 213.  |  |  |  |  |
| Disposition of Claims  |  |   |  |  |  |  |
| 4) Claim(s) 1-12 is/are pending in the application.  |  | •   |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |   |  |  |  |  |
| 5) Claim(s) is/are allowed.  |  |   |  |  |  |  |
| 6) Claim(s) is/are rejected.   |  |   |  |  |  |  |
| 7) Claim(s) is/are objected to.  |  |   |  |  |  |  |
| 8) Claim(s) <u>1-12</u> are subject to restriction and/or e  | election requirement.  |   |  |  |  |  |
| Application Papers   |  |   |  |  |  |  |
| 9) The specification is objected to by the Examine   | r.   |   |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) acce  | epted or b) objected to by   | the Examiner.   |  |  |  |  |
| Applicant may not request that any objection to the  | drawing(s) be held in abeyance   | e. See 37 CFR 1.85(a).  |  |  |  |  |
| Replacement drawing sheet(s) including the correcti  | ion is required if the drawing(s)  | is objected to. See 37 CFR 1.121(d).  |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Ex  | aminer. Note the attached C  | Office Action or form PTO-152.  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |   |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the priority</li> </ul>   | s have been received.<br>s have been received in App   | olication No  |  |  |  |  |
| application from the International Bureau  | •  |   |  |  |  |  |
| * See the attached detailed Office action for a list   | , , , , ,  | ceived.   |  |  |  |  |
|  |  |   |  |  |  |  |
| Attachment(s)  | <b>√</b> □   | (DTO 442)   |  |  |  |  |
| 1)   |  | nmary (PTO-413)<br>⁄Iail Date   |  |  |  |  |
| Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  | 5) ☐ Notice of Infor<br>6) ☐ Other:  | rmal Patent Application (PTO-152)   |  |  |  |  |

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Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1 and 2, drawn to a fermentation process, classified in class 127, subclass37.

II. Claims 3-12, drawn to a process for delignifying a biomass with ethanol,classified in class 162, subclass 77.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions The process of Group I does not require the delignifying in a digester, circulating in a holding tank or the draining as required by Group II. Group II does not require the fermentation of low value and waste sugars together with residues from the sugar cane industry.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

## Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without

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underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A

  COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program
  listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables
  having more than 50 pages of text are permitted to be submitted on compact
  discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)

- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).

- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

## Content of Specification

- (a) <u>Title of the Invention</u>: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data shet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) <u>Cross-References to Related Applications</u>: See 37 CFR 1.78 and MPEP § 201.11.
- (c) <u>Statement Regarding Federally Sponsored Research and Development</u>: See MPEP § 310.
- (d) <u>Incorporation-By-Reference Of Material Submitted On a Compact Disc.</u> The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and

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Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, <u>Reference to a "Microfiche Appendix</u>": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

- (e) <u>Background of the Invention</u>: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
  - (1) <u>Field of the Invention</u>: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
  - (2) Description of the Related Art including information disclosed under 37

    CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."

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- general statement of the invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth.

  Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (g) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f).A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (h) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the

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art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

- Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

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(k) Sequence Listing, See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure; e.g the specification should be double spaced and a claim should be a single sentence. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

Applicant is advised of the availability of the publication "Attorneys and Agents Registered to Practice Before the U.S. Patent and Trademark Office." This publication is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Alvo whose telephone number is 571-272-1185. The examiner can normally be reached on 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-2179197 (toll-free).

Steve Alvo

Primary Examiner Art Unit 1731

msa